Contact

www.linkedin.com/in/blake-
wilson-9522972b (LinkedIn)

Top Skills

Network Engineering

Network Design

Network Installation

Blake Wilson

Sr. Network Engineer at Apple

Cupertino

Summary

Energetic and enthusiastic telecommunications optical and packet networking professional with 12+ years of experience in all facets of DWDM transport and Packet-Optical networking. Extensive experience across the full spectrum of network activities including Optical and Packet Network Design, Network Deployment, and Network Operations and Troubleshooting. Experience in working with Tier-1 service providers and some of the largest Web 2.0/ Content Service Provider companies.

Web2.0/Content Service Provider Networking: 7+ years of experience in directly working with the world's largest Web2.0/CSP operators, providing direct support, network design, and deployment consultation & services.

High Capacity DWDM Optical Networking: Extensive experience in Multi-Tbps Coherent Optical technologies with specific emphasis on Metro/Regional/LongHaul DCI architectures (CDC ROADM).

Packet Optical Networking: Experience in design, deployment, and trouble-shooting, as well as education/consultation of a wide array of Packet-Optical networks including:
- Carrier Ethernet (MEF, .1Q, .1ad), IP/MPLS (OSPF, IS-IS, RSVP, LDP), Network Protection (xSTP, G.8032, G.8031, LAG/LACP, FRR), Network management, Ethernet/Packet OAM/PM (802.1ag/ Y.1731/BFD).

Global Network Deployment and Operations: Comprehensive experience in the planning, deployment, and operation of metro and regional optical and packet networks throughout the world.

NPI Product Evaluation and Testing: 7+ years of experience in leading the testing/evaluation of new products and technologies. Proven track record of rapid accumulation of knowledge and

experience from all levels of DWDM/Optical transport through to Carrier Ethernet and IP/MPLS platforms.

Multi-Vendor Interoperation: Broad experience in interoperating and/or providing backhaul services for the following Cisco, Juniper, Fujitsu, Cyan, Ciena, NSN, Atrica, Accedian, Overature, Dragonwave, Axerra.

———

Experience

Apple
Sr. Network Engineer
July 2015 - Present (5 years 10 months)

BTI Systems
7 years 11 months

Sr. Systems Engineer
August 2007 - June 2015 (7 years 11 months)
San Francisco Bay Area, Ottawa, Canada

Sr. Systems Engineer – Content Service Provider
With direct focus on Web2.0 and CSP customer base, I am responsible for providing both Pre/Post Sales Engineering and technical expertise to existing and prospective customers.

o Serve as technical lead for customer NPI rollout of BTI's Next Generation Multi-Tbps Optical-LSR platform.
o Provide product subject matter expertise to CSP customers and account teams.
o Maintain and build upon the close customer-vender partnership established in the early part of the product evaluation phase. Primary objective is to ensure network deployments and day to day operation of the deployed networks run as seamlessly as possible.
o Support and escalate, as required, any issues relating to s/w, h/w, operations, and logistics to the appropriate parties ensuring full resolution and follow through is performed.
o Preparing and delivering technical product/solution overviews to customers.
o Create network designs and pricing quotes bested on customer requirements.

o Provide technical lead in preparing and presenting response to customer RFP/RFQ.

o Provide technical lead role in product evaluations, demos, and trials.

Solution Architect
December 2011 - July 2014 (2 years 8 months)

Working directly within the Product Line Management (PLM) group my responsibilities included providing subject matter expertise across full product portfolio including all past, current, and future feature releases.

Product Portfolio SME:

Serve as point of contact to field teams, customers, internal engineering in order to provide details and technical expertise on past, current, and upcoming features of the various products in the portfolio. Specific emphasis on next-generation product-set though full legacy product knowledge was also required.

Create detailed Method of Procedure documents used by internal field teams as well as end customers.

Serve as technical prime in customer facing engagements in order to provide in-depth details of product and architecture.

Provide onsite expertise during network rollout activities. In particular, ensure that First Office Applications/Deployments are successful and end customer's comfort/satisfaction level is maximized. Any shortcomings are fully resolved and lessons learned are integrated into product enhancements and/or future procedures.

Develop and deliver initial product training content on new features. Include creation of written and video recorded training sessions. Follow up with working with Customer Training team on creation of end customer documentation.

Customer Test and Evaluation:

Responsible for leading major customer facing NPI demos and trials. Product and feature set ranging from beta and full customer available releases.

Create customer facing demo and test plans used during product evaluation.

Serve as liaison between engineering, sales teams, and end customer to ensure customer applications and enhancements/feature requests are fully understood and are successfully integrated into end product.

Provide ongoing point of contact with customer in order to ensure continuity from product testing and evaluation through to deployment and beyond.

System Engineer
January 2010 - December 2011 (2 years)

Reporting directly to VP of sales, my primary role was to provide technical leadership and support to the Global Sales team.

Packet-Optical Network Design and Consultation: Primarily responsible for Carrier Ethernet Networks:
Provide technical leadership during customer engagements including:
• Product proposals and whiteboard sessions.
• Proof of concept trials and product evaluations.
Provide guidance and expertise to Sales Engineering team in order to assist with bid response, network design, and network deployments.
Provide consultation to end customers, providing technical guidance on a wide range of topics including networking best practices and application overview – for example; educating a customer, who is new to the mobile backhaul space, providing details on common practices and potential issues seen in other similar networks.

Overall Product Portfolio Design and Consultation: Leverage practical and design experience in all layers of networks to provide end-to-end solution guidance and expertise:
Optical Network Design - CWDM, DWDM, passive optical networks, dynamic optical networks (ROADM), hybrid networks, etc.
Carrier Ethernet (layer-2) Network Design.
Content Aware (Content Caching) Networks.
Network Management.
Network Operations.

System Engineer
August 2007 - August 2009 (2 years 1 month)

Served as one of BTI Systems' lead customer engineers, tasked with customer interfacing engineering services.

Network deployment and integration: Responsible for end-to-end life cycle of customer network deployments including:
Project management
Pre-deployment network trials and staging
On site network installation
Network acceptance testing

Customer Technical Training: Responsible for delivering sound technical training and advice to wide range of customer audience. Experience includes:
WDM networking
Optical transponders & Muxponder, amplifiers, WDM optics, Metro Ethernet devices
Optical network planning
Optical network deployment
Optical network troubleshooting

Customer Technical Support: Responsible for providing Level-2/Level-3 technical support to customers and in-house engineers including:
Remote network/deployment troubleshooting
On-site network troubleshooting and resolution
Experience in troubleshooting Layer-0 (Optical) to Layer-3 (Network)

Network Experience: Experience in design and deployment of the following network topologies:
CWDM & DWDM (Metro-Core and Metro-Edge) optical layer transport
SONET/SDH Multiplexing networks
Metro Ethernet packet-switched networks

DragonWave Inc.
Systems Engineer/Project Manager
September 2009 - January 2010 (5 months)

Provided technical expertise and project management leadership for large scale Microwave Backhaul based networks.

Cellular Backhaul Networking: Served as one of the primary project managers and technical/engineering consultants for a large scale network rollout:
Co-managed overall deployment project planning and execution.
Provided day to day technical/logistical guidance to multiple (10+) sub-contracting deployment crews.
Provided on-site technical expertise to deployment crews:
• RF alignment/interference issues
• Backhaul layer2/3 network debugging
• Network acceptance testing strategies

Provided engineering consultation to end customer's network operations and technical teams.

Provided technical liaison services between end customer (cellular carrier), construction subcontractor, Radio/backhaul Network vendor, and Dragonwave.

Canadian Armed Forces
Officer
August 2004 - February 2007 (2 years 7 months)
Canada

Worked and trained in an extremely dynamic environment in order to gain the experience and skills required as both an officer and pilot in the Canadian Forces.
Duty Operations Officer – Special Operations Aviation Squadron:
- Functioned as the commanding officer's representative, serving as primary point of contact to the squadron,
- Responsible for oversight and coordination of daily squadron operations,
- Performed aircraft and flight schedule conflict resolution,
- Coordinated staff and resources to ensure seamless flow of daily flying and operational activities.

Served on numerous field deployments requiring planning for multi day operations in remote areas. Deployments required the ability to adapt to and account for multiple dynamic scenarios.
Trained at a high level essential to operate aircraft at a high standard in a limited time frame. Commitment and dedication were essential in order to adapt to the fast paced learning/testing environment.

University of Waterloo
Research Scientist - Institute for Quantum Computing
September 2003 - May 2004 (9 months)
Waterloo, ON, Canada

Developed noise characterization procedures in order to assess electromagnetic interference levels relevant to quantum computing research:
Indirectly measured electromagnetic interference levels by exploiting the noise susceptibility characteristics of a superconducting device.
Development process required advanced knowledge of; low temperature physics, EMI/EMC, RF measurement and characterization, analog/digital circuit design, software based automation, and laboratory procedures.
Attention to detail and trouble shooting skills were essential in order to attain desired results.

Canadian Space Agency

Systems Integrator
January 2003 - August 2003 (8 months)

Worked independently on the implementation of multiple computer and hardware based projects in supporting CSA's Thermal-Vacuum qualification test facility:

Developed complex LabVIEW based control interfaces for both a low temperature cryostat and a multiple channel temperature control system. The Virtual Instruments operated on a Client-Server basis.

Researched and assembled necessary hardware for a multi-channel temperature control system to be used in future RADARSAT-2 and other space simulation thermal-vacuum tests.

Implemented a Windows 2000 based domain onto the previously existing local area network. Emphasis was placed on network security.

Assembled and maintained twenty-plus computer workstations, including three Dell 6000 series servers.

Ceyba
Optical System Designer - Coop
May 2002 - August 2002 (4 months)

Operated, both independently and closely with senior optical designers, in supporting dispersion compensation activities:

Performed acceptance tests of newly procured optical components. Upon completion, test results were documented and presented, along with recommendations, to senior optical staff for final approval. Duties also included working directly with vendors in resolving measurement discrepancies between test facilities.

Designed and developed a LabVIEW based test bench for the evaluation of optical component properties. The completed software package was implemented by the systems integration department for production line testing of completed components.

Developed and tested tuneable dispersion control algorithms. Tests were performed on, and required the exclusive use of, one of Ceyba's 10Gbps ultra-long haul network test setups.

Multiple software packages were used extensively in simulation, automation, and data processing applications. Packages include: LabVIEW, TCL, C++, and Matlab.

Nortel Networks
Research Engineer - Coop
January 2001 - December 2001 (1 year)

Worked independently under the supervision of senior optical designer:
Tested and characterized semiconductor optical amplifiers and tuneable laser devices.
Developed LabVIEW based programs in order to automate the characterization process and in turn increased measurement efficiency and accuracy.
Testing process required the development of specialized techniques in order to precisely manipulate micrometer sized components used in test setups.

Researched and developed a prototype next generation display device:
Designed and developed an analog/digital control circuit which functioned to manipulate and convert image data, control physical imaging elements, and act as a user interface.
Developed code, using; C++, Visual Basic, and Assembly Language. Software applications were implemented in the following ways:
Image processing and file conversion,
Human-Machine interface used in controlling the prototype device,
Embedded device programming used to control the various required components through a central microcontroller.
Assembled required bench top optics, consisting of optical filters and lenses, laser.

──────

Education

University of Waterloo
Honours BSc, Physics · (1999 - 2004)